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FREDERIC M. DOUGLAS 15333 CULVER DRIVE SUITE 340 PMB 114 IRVINE, CA 92604			POON, KING Y	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/892,425	Applicant(s) WANG ET AL.	
	Examiner King Y. Poon	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 13, 14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/8/2005.
2. Applicant has not provide with a ground for the traversal of the restriction requirement. The requirement is therefore still deemed proper and made FINAL.
3. This application contains claims 13, 14 drawn to an invention nonelected with traverse in Paper filed on 10/8/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 9: The limitations of "illuminating sections of the code strip as the fiduciary marks pass under the light emitting diode array" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Foote et al. (US 6,008,826).

Regarding claim 6: Foote et al. teach (column 4:lines 50-50, RAM 66 that stores an image as four individual color sub-images which inherently includes overlapping of individual colors to produce a color image of more than four colors. More specifically, two colors can be laid one on to of the other to create the complete and correct color image combined from all of the individual color sub-images. Furthermore, Foote et al. teach (column 4:lines 62-66) an alignment/registration mark calculation procedure to make image plane adjustments in order to prevent error in the color sub-image alignment. In column 3:line 60 - column 4, line 13, Foote et al. teach development stations of each color sub-image that form marks (i.e. code strip) on the belt that are sensed by sensors 50 and 50, for misregistration errors. Additionally, in column 5:lines

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29-48, Foote et al. teach that position data is taken from each color developer's marks on the belt, and compared to a reference mark to calculate adjustment parameters (i.e. offset, skew, and/or width errors) for each color sub-image.

Therefore, in reference to the claimed invention in claim 6, the method is accomplished by sensing the marks for one color plane (i.e. a part of the code strip) so registration is correct when that color plane is printed (i.e. when first toner particle is printed, and the printing is a function of the position of detection of the code strip, also see column 7, line 1; 122, 124 of fig. 5). Then, positional data for a subsequent color plane is taken from its mark on the belt (i.e. sensed from the code strip) so it's color sub-image (i.e. second toner particle) will line up correctly on top of another color sub-image in the case outlined above where two colors are stacked on top of each other.

Regarding claim 7, Foote et al. teach wherein the at least two print stations are a first print station comprising the first toner particle and a second print station comprising the second toner particle (column 3, lines 15-25, color stations 28, 30, 32, & 34 can all be selected to represent a color sub- image/colorplane of their own color; inherently all print station print with at least one toner particle).

Regarding claim 8, Foote et al. teach the method of claim 6, wherein prior to sensing a code strip, preparing the code strip by arranging a plurality of fiduciary marks to convey a bi-directional pattern (column 3, line 60- column 4, line 13, fiduciary marks of the code strip are formed on belt 22 orthogonal to and at oblique angles to the process direction, providing a bi-directional pattern).

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8. Claims 10, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Daniele et al (US 4,837,636).

Regarding claim 10, Daniele et al. teach an image forming apparatus having a movable organic photoconductor member (column 3:lines 38-40, printer 5 having photoreceptor 10) comprising: (a) a series of discrete fiduciary marks located on a code strip (the marks form the code strip) arranged about the circumference of the photoconductor member, the row of marks/code strip extending in a direction parallel to the direction of movement of the photoconductor member (column 5:lines 55-50, photoreceptor 10 with row 81 of fiduciary marks around photoreceptor circumference), and (b) an image sensor (motion sensor 9 and the circuit of fig. 6), positioned so that the at least one sensor views a portion of the photoconductor member including at least two of the marks (column 5, line 61 -column 6:line 3, motion sensor 9, has a scanning array of sensors 85 that parallel to the direction of movement of the photoconductor member), wherein the sensor repeatedly scan the photoconductor member portion and the marks currently viewed by the sensor and detects light pulses reflected from the code strip (inherently properties of the sensor of Daniele) to track the movement (column 6, lines 60-69) of the photoconductor member and the sensor generate a digital signal (104, fig. 6).

Regarding claim 11: Daniele et al. teach the apparatus of claim 10 wherein the fiduciary marks are transparent or translucent fiduciary marks, alternating with opaque or translucent marks (column 6, lines 12-15).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foote et al (US 6,008,826) and Daniele (US 4,837,636).

Regarding claim 15, Foote et al. teach a method of compensating for image misregistration of a pixel produced by a light source (figure 1, laser scanner 42) onto an belt (belt 22, column 3, lines 20-25) surface in an imaging system (column 3, lines 27-29, laser scanner 42 imparts charge for pixel that is passed to the media sheet on the belt 22), the pixel having an uncompensated pixel position that is out of alignment with an ideal pixel position (column 4, lines 2-13, sensors use error values to determine the difference between reference, i.e. ideal, and sensed, i.e. uncompensated, marks), the method comprising: sensing fiduciary markings on a code strip affixed onto the belt (moving with the belt) with at least one sensor (column 5, lines 29-34, the code strip, which consists of registration marks (i.e. fiduciary marks) formed on the belt 22, is sensed by optical sensors 50 and/or 50'); the markings measured in at least two orthogonal directions (column 3, line 60 - column 4, line 1, with respect to process direction, registration markings on belt 22 are orthogonal and at oblique angles); determining the image misregistration as a distance between the ideal pixel position and

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the uncompensated pixel position (column 5:line 64 - column 6:line 8, when determining misregistration, actual sensed marks (i.e. uncompensated pixel positions) are compared to proper mark position (i.e. ideal pixel position) and their time differences are multiplied by belt speed to determine a distance. The equation follows: $T \cdot s = D$ where T is a time unit, s is a distance unit over a time unit and D is a distance unit left after the two time units cancel in the multiplication); and matching the uncompensated pixel position to the ideal pixel position (column 6, lines 41-45 & 56-65, the difference in distance is corrected/matched in accordance with scan resolution for each machine).

Foote does not teach a photoconductor belt.

However, Foote teaches his invention is related and used to modified the printing device that use photoconductor belt for printing (column 1, lines 25-40, column 2, lines 20-40).

Moreover, Daniele teaches a multi-station printing device that uses a photoconductive belt for printing and includes using strip code moving with the belt for correcting misregistration.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Foote by using his invention to the printing system of Daniele such that Foote would gain by increasing market share and Daniele would gain by eliminating the costly research which was done by Foote to benefit Daniele's invention.

Regarding claim 16, Foote et al. teach the method of claim 15, wherein the matching step comprises: delaying a formation of the pixel on the substrate by an

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amount of time corresponding to the image misregistration (column 5:lines 39-48, adjustment parameters/factors are used to control color placement of the laser scanners/light sources in order to reduce the misregistration. Column 6:lines 57-65, in fixing misregistration, the light source is activated to impart a pixel of charge after a distance, which, column 5, line 64 - column 6, line 8, is proportional to a time unit. Therefore, formation of the pixel is delayed an amount of time corresponding to the distance calculated by the misregistration equation above).

Regarding claim 17, Foote et al. teach the method of claim 16, wherein the matching step further comprises: determining a time factor based on the image misregistration (column 6:lines 1-3, the time factor value resulting from subtracting T1 C from T2C is based on image misregistratiton).

Regarding claim 18, Foote et al. teach the method of claim 16, wherein the step of determining a time factor further comprises: determining a time factor that is proportional to a magnitude of the distance of the image misregistration (column 6, lines 1-8, time factor resulting from subtracting DC from T2C is proportional to the distance by a multiple of belt speed).

Regarding claim 19, Foote et al. teach the method of claim 15, wherein the determining step further comprises: determining a magnitude of the distance of the image misregistration (column 5:line 64 - column 6:line 8, when determining misregistration, actual sensed marks (i.e. uncompensated pixel positions) are compared to proper mark position (i.e. ideal pixel position) and their time differences are multiplied by belt speed to determine a magnitude of the distance. The equation follows: $T*s=D$,

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where r is a time unit, s is a distance unit over a time unit and D is a distance unit left after the two time units cancel in the multiplication).

Regarding claim 20, Foote et al. teach the method of claim 19, wherein the matching step further comprises: determining a time factor that is proportional to the magnitude of the distance of the image misregistration (column 6, lines 1-8, time factor resulting from subtracting $T1\ C$ from $T2C$ is proportional to the distance by a multiple of belt speed).

Regarding claim 21, Foote et al. teach the method of claim 20, wherein the matching step further comprises: actuating the light source at a time modified by the time factor (column 5, lines 39-48, adjustment parameters/factors are used to control color placement of the laser scanners/light sources in order to reduce the misregistration. Column 6:lines 57-65, in fixing misregistration, the light source is activated to impart a pixel of charge after a distance, which, column 5:line 64 - column 6: line 8, is proportional to a time unit. Therefore, formation of the pixel is delayed an amount of time corresponding to the distance calculated by the misregistration equation above).

Regarding claim 22, Foote et al. teach the method of claim 19, wherein the determining step further comprises: determining a direction of the image misregistration (column 5, lines 60-63, calculations are accomplished for x - and y positions).

Regarding claim 23, Foote et al. teach the method of claim 22, wherein the matching step further comprises: determining a time factor that is proportional to the magnitude of the distance of the image misregistration (column 6:lines 1-8, time factor

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resulting from subtracting DC from T2C is proportional to the distance by a multiple of belt speed) and that has a sign indicative of the direction of the image misregistration (column 5:lines 60-63, when determining the time factor for the misregistration, x- and y-signs indicate the direction of image misregistration).

Regarding claim 24, Foote et al. teach the method of claim 23, wherein the matching step further comprises: actuating the light source at a time modified by the time factor (column 5:lines 39-48, adjustment parameters/factors are used to control color placement of the laser scanners/light sources in order to reduce the misregistration. Column 6:lines 57-65, in fixing misregistration, the light source is activated to impart a pixel of charge after a distance, which, column 5:line 64 - column 6:line 8, is proportional to a time unit. Therefore, formation of the pixel is delayed an amount of time corresponding to the distance calculated by the misregistration equation above).

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foote et al (US 6,008,826) and Daniele (US 4,837,636) as applied to claim 15 above, and further in view of Agano (US 5,930,567).

Regarding claim 25: Foote et al. teach the method of claim 15, wherein the imaging system includes a light source (fig. 1, laser scanner 42) producing a pixel having an uncompensated pixel position that is out of alignment with an ideal pixel position; the determining step comprising: determining the image misregistration as a distance between the ideal pixel position and the uncompensated pixel position (column

5:line 64 - column 6:line 8, when determining misregistration, actual sensed marks (i.e. uncompensated pixel positions) are compared to proper mark position (i.e. ideal pixel position) and their time differences are multiplied by belt speed to determine a distance. The equation follows: $T \cdot s = D$ where T is a time unit, s is a distance unit over a time unit and D is a distance unit left after the two time units cancel in the multiplication); and matching the uncompensated pixel position to the ideal pixel position (column 6:lines 41-45 & 56-65, the difference in distance is corrected/matched in accordance with scan resolution for each machine).

Foote et al. do not teach the light source as an array of light sources.

However, Agano teaches in column 4:lines 46-53, optical means as a light emitting diode array.

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the diode array taught by Agano in the system taught by Foote et al. because the teachings of Agano add more design versatility the light source design choice of Foote et al.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daniele et al (US 4,837,636) as applied to claim 10 or 11 above, and further in view of Tsuruoka et al (US 6,160,978).

Regarding claim 12, Daniele et al. teach the apparatus of claim 10 or 11, but do not specifically teach the apparatus in which the movable photoconductor member comprises an endless photoreceptor belt.

However, Tsuruoka et al. teach a endless photoconductor belt (column 8:line 42 & figure 4, endless transfer belt 4).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used a endless photoconductor belt as taught by Tsuruoka et al. in the apparatus taught by Daniele et al. because it is less apt to ripping at the seams, and to prevent the belt from running out.

13. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniele et al (US 4,837,636) and Foote et al (US 6,008,826).

Regarding claim 1, Daniele et al. teach an imaging system (fig. 1) to create a toner particle stack that compensates for image misregistration, the imaging system comprising: a printing station (column 4:lines 4 & 14, development station C and transfer station D); at least one sensor (column 5:line 61, motion sensor 9), a photoreceptor belt (column 5, line 5, photoreceptor 10) comprising a code strip (column 5:lines 55-57, row 81 of fiduciary marks) wherein the code strip is disposed adjacent to the at least one sensor (column 5, lines 61-66, sensor 9 is in line/adjacent with code strip 80).

Daniele et al. do not teach at least two printing stations.

However, Foote et al. teach at least two printing stations (column 3, lines 15-25, developer stations 28, 30, 32, & 34).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the multiple printing stations taught by Foote et al. in the system

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taught by Daniele et al. because the teachings of Foote et al. allow specific colors to be separated for fixing to a sheet of paper.

Regarding claim 2, the claim rejection of claim 1 is representative of claim 2. See Daniele et al. teachings wherein the code strip includes a plurality of fiduciary marks (column 5:lines 55-60, code strip 81 consists of multiple fiduciary marks in the form of holes or marks, column 6, lines 10-15).

Regarding claim 3, Daniele et al. & Foote et al. combine to teach the imaging system of claim 2. Foote et al. teachings further include wherein fiduciary marks on a belt that are arranged to convey a bi-directional pattern (column 3: line 60-column 4, line 13, fiduciary marks are formed on belt 22 orthogonal to and at oblique angles to the process direction, providing a bi-directional pattern).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention that the bi-directional fiduciary mark pattern taught by Foote et al. improves the in the imaging system taught by Daniele et al. because it allows multiple directions of misregistration to be analyzed.

Regarding claim 4, the claim rejection of claim 2 or 3 is representative of claim 4. See Foote et al. teachings wherein each fiduciary mark comprises a first segment and a second segment disposed at an angle to the first segment (figure 4, markings 102 and 104 & column 3:line 65 - column 4:line 1, second line is set at an oblique angle to process direction, which could include either acute or obtuse angles).

Regarding claim 5, the claim rejection of claim 1 is representative of claim 5. See Foote et al. teachings wherein the code strip is an image printed upon the belt (column 3:line 60-column 4:line 13, marks are imprinted on the belt 22).

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daniele et al. (US 4,837,636) & Agano (US 5,930,567).

Regarding claim 9, Daniele et al. teach in a non-impact printer (figure 1, printer 5) having a moving organic photoreceptor (column 3:lines 38-40, printer 5 having photoreceptor 10), fiduciary marks on the moving photoreceptor surface (column 5:lines 55-57, photoreceptor 10 with row 81 of fiduciary marks), an image information data signal source (column 5,lines 15-18, array 71 provides electric image signal from the printer 5) and a suitable optical means (column 5, lines 38-48) to focus a beam onto a charged photoreceptor 10 in accordance with the content of the image signal (i.e. cycling a predetermined activation interval followed by an inactivation in order to form the image). Daniele et al. further teach the method comprising: illuminating sections of the code strip as the fiduciary marks passed under the sensor (CCD sensor inherently needs illumination/light to be functioning); detecting light reflected from the code strip to track the motion of the photoreceptor (column 6, lines 60-68); monitoring the motion of the photoreceptor to generate a timing signal representative of the photoreceptor motion (column 6:lines 25-68, clocking is used to monitor photoreceptor speed); and delaying input of the data signal to the diode array in response to variations in the timing signal by varying the duration of the interval of diode non-actuation while maintaining the

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predetermined interval of diode energization, whereby actuation of individual groups of the diode array is synchronized with motion of the photoreceptor (column 6: lines 60-68, should the photoreceptor speed change, the image out portion synchronizes, along with other portions of the system, accordingly to the change in photoreceptor speed, i.e. delays the input of the data signal to the suitable optical means to keep synchronization with the belt).

Daniele et al. do not teach the suitable optical means as a light emitting diode array.

However, Agano teaches in column 4:lines 46-53, optical means as a light emitting diode array.

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the diode array taught by Agano in the system taught by Daniele et al. because the teachings of Agano add more design versatility the optical means design of Daniele et al.

Response to Arguments

15. Applicant's arguments filed 5/13/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that Foote does not teach transferring a second toner particle onto the first toner particle; has been considered.

In reply: In Foote's invention, toner particles are control to be transferred to a any location from any of printing station. For example, a scanner of any of the station of

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fig. 1 would start scanning a scan line in X direction, column 6, lines 45-55. Since each scan station can start scanning on any X direction; Foote's invention includes scanning Y station at X1 location, and C station would also scan at X1 location. Therefore, Foote teaches scanning by the different stations at any locations including scanning at the same location.

With respect to applicant's argument that Foote does not disclose sensing the code strip with a sensor to produce a first position signal, has been considered.

In reply: Column 4, lines 1-15, and fig. 6 clearly teaches the error signal indicates a position error regarding the transferring of toner particles onto the belt that forms fig. 4 and fig. 6.

With respect to applicant's argument that Daniele does not teach code strip/translucent fiduciary marks, has been considered.

In reply: Daniele, column 6, lines 12-16, clearly teaches translucent fiduciary marks, the examiner interprets the strip area that contains the translucent fiduciary marks of fig. 2 is the code strip.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

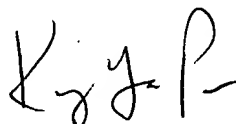
Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 9, 2006



**KING Y. POON
PRIMARY EXAMINER**